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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,824	11/20/2001	Reza P. Rassool	P 271178	8821

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EXAMINER

GODDARD, BRIAN D

ART UNIT	PAPER NUMBER
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2161

DATE MAILED: 01/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center"><b>Office Action Summary</b></p>	<p><b>Application No.</b></p> <p>09/988,824</p>	<p><b>Applicant(s)</b></p> <p>RASSOOL ET AL.</p>	
	<p><b>Examiner</b></p> <p>Brian Goddard</p>	<p><b>Art Unit</b></p> <p>2161</p>	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 July 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12,15-17 and 19-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8,10-12,15,17,19-32,36-43 and 47-50 is/are rejected.
- 7) ☒ Claim(s) 9,16,33-35 and 44-46 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7/29/2004</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This communication is responsive to the Amendment filed 8 July 2004.
2. Claims 1-12, 15-17 and 19-50 are pending in this application. Claims 1, 27, 38 and 50 are independent claims. In the Amendment filed 8 July 2004, claims 13, 14 & 18 were cancelled; claims 49 & 50 were added; and claims 1, 7-11, 15, 19, 27, 29, 38 and 42 were amended. This action is made Final.

### ***Claim Rejections - 35 USC § 112***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claim 50 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 50 recites selection of an algorithm from an open-ended list of algorithms (e.g. "selected...from a plurality of...algorithms **comprising**...") {emphasis added}. This language is indefinite because it is unclear what is included and excluded from the open-ended list. One cannot be apprised of the scope of the claimed invention due to the requirement of selecting an item from an infinite, open-ended list. In the interest of compact prosecution, the examiner assumes that "comprising" in the fifth line of the claim should be 'consisting of', in order to recite selection from a proper closed list.

***Claim Rejections - 35 USC § 103***

4. Claims 1-8, 10-12, 15, 17, 19-24, 27-32, 36-43 and 47-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,675,174 to Bolle et al. in view of U.S. Patent No. 6,460,050 to Pace et al. and U.S. Patent No. 5,903,892 to Hoffert et al.

Referring to claim 1, Bolle discloses a method for identifying a media file substantially as claimed. See Figures 1-6 & 11-12 and the corresponding portions of Bolle's specification for this disclosure. In particular, Bolle teaches a method [See Figs. 1-2 & 11-12] for identifying a media file, the method comprising:

generating [See Figs. 1A & 2A] a media file identifier [segment index table & segment identifier] for a known media file [Reference Media File/Segment(s) 110];

storing [See Figs. 1A & 2A] the media file identifier for the known media file in a database [175];

searching [See Fig. 2B & 11-12] a collection of machine readable data [e.g. web sites on the Internet] to locate an unknown media file therein [See column 27, lines 20-54];

generating [See steps 1110-1140] a media file identifier [segment index table & segment identifier] for the unknown media file [whole file or partial (interval) file if media is streaming] located in the collection of machine readable data [See column 27, lines 20-57];

determining an address [URL] of the unknown media file in the collection of machine readable data [See column 27, lines 45-57];

storing the media file identifier for the unknown media file [See Figs. 1-2] in the database [175];

storing the address of the unknown media file [See Figs. 1-2] in a database [175];

associating [See Figs. 1-2 & 10] the stored address of the unknown file with the stored media file identifier for the unknown media file; and

comparing the media file identifier for the known media file with the media file identifier for the unknown media file in order to determine if the respective media files from which the known media file identifier and the unknown media file identifier were generated have sufficiently similar media content [See Figs. 2B & 11-12 and column 27, lines 20-57].

Bolle's system and method does not explicitly enable a customer to generate the media file identifier for a known media file as claimed. Pace, however, discloses a content identification system similar to that of Bolle, wherein an agent on a client machine enables a customer [client] to generate a file identifier [file content ID] for a known content file and submit the identifier to be stored in a database for further comparison. See the Abstract, Summary, and claim 1 for the details of this disclosure. Pace further discloses reasons for doing so in the Background and Summary of the Invention section, including a main objective of maintaining client privacy & confidentiality.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add a client agent, similar to that of Pace but using Bolle's algorithms to generate the file identifiers, to Bolle's system so as to enable

clients/customers supplying the reference media files/segments in Bolle's system to do so in a confidential manner. One would have been further motivated to make such a combination in order to reduce the processing load on Bolle's indexing engine by putting some of this load on the clients/customers instead, thus making Bolle's system more efficient.

Bolle's (as modified by Pace) system and method does not explicitly search "based on exclusion information" as claimed. Hoffert, however, discloses a crawler for indexing media content similar to that of Bolle, wherein searching to locate an unknown media file is performed "based on exclusion information" as claimed. See column 4, line 45 et seq. for the details of this disclosure. Hoffert further discloses a commonly known purpose for doing so as to avoid repetitive (and thus wasted) searching by excluding URL's that are already known to the crawler/search system.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify Bolle v. Pace to include Hoffert's exclusion function in Bolle's crawler to obtain the invention as claimed. One would have been motivated to do so for the reasons disclosed by Hoffert as provided above, to avoid repetitive searching and wasted processing resources by excluding sites/URLs which are already known/trusted in the system.

Referring to claims 2-5, Bolle v. Pace & Hoffert discloses the method for identifying a media file as claimed. See Figures 1-2 and column 27, lines 20-57 of Bolle's specification for this disclosure. Bolle v. Pace & Hoffert teaches the method for identifying a media file as defined in claim 1, as above, wherein the machine readable

data resides on a computer network, the Internet, and wherein the searching is accomplished by a crawler capable of searching a network site [web site] based on an address [URL] for the network site provided by an administrator as claimed.

Referring to claim 6, Bolle v. Pace & Hoffert discloses the method for identifying a media file as claimed. See Figures 1-2 and column 27, lines 20-57 of Bolle's specification for this disclosure. Bolle v. Pace & Hoffert teaches the method for identifying a media file as defined in claim 5, as above, wherein the crawler is further capable of analyzing the machine readable data residing on the network site to generate an address [URL] of another network site to be searched [See column 27, lines 47-54] as claimed.

Referring to claim 7, Bolle v. Pace & Hoffert discloses the method for identifying a media file as claimed. See Figures 1-2 and column 27, lines 20-57 of Bolle's specification for the details of this disclosure. Bolle v. Pace & Hoffert teaches the method of claim 6, as above, wherein the generating of the media file identifier for the unknown media file further comprises downloading the unknown media file and then analyzing the unknown media file with an identifier generating algorithm [See column 27, lines 42-57] as claimed.

Referring to claim 8, Bolle v. Pace & Hoffert discloses the method for identifying a media file as claimed. See Figures 1-2 and column 27, lines 20-57 of Bolle's specification for this disclosure. Bolle v. Pace & Hoffert teaches the method of claim 7, as above, wherein the unknown media file is a streaming media file [See Summary of the Invention section as well as portions cited above] and wherein the generating of the

media file identifier...is accomplished by playing the unknown media file as a stream of data [See column 27, lines 42-57] and analyzing the stream...as claimed.

Referring to claim 10, Bolle v. Pace & Hoffert discloses the method for identifying a media file as claimed. See Figures 1-5 and the corresponding portions of Bolle's specification for this disclosure. Bolle v. Pace & Hoffert teaches the method of claim 7, as above, wherein the unknown media file is a video file and wherein the media file identifier is generated by an identifier generating algorithm that is a word count algorithm [segment counter (also see Summary of the Invention section)] as claimed.

Referring to claim 11, Bolle v. Pace & Hoffert discloses the method for identifying a media file as claimed. See Figures 1-6 & 11-12 and the corresponding portions of Bolle's specification for the details of this disclosure. Bolle v. Pace & Hoffert teaches the method of claim 1, as above, further comprising providing the address of the unknown media file in response to a determination that the known media file identifier and the unknown media file identifier were generated from media files having sufficiently similar media content [See above and column 27, lines 20-57] as claimed.

Referring to claim 12, Bolle v. Pace & Hoffert discloses the method for identifying a media file as claimed. See Figures 1-2 and the corresponding portions of Bolle's specification for this disclosure. Bolle v. Pace & Hoffert teaches the method of claim 11, as above, further comprising providing metadata [segment features in segment index table] that includes information sufficient to identify the unknown media file, storing the metadata in a database [175] and associating the metadata with the unknown media file [See above] as claimed.



Claim 15 is rejected on the same basis as claim 11. See the discussions regarding claims 1-8 & 10-11 above, as well as the portions of Bolle, Pace & Hoffert cited therein, for the details of this disclosure.

Claim 17 is rejected on the same basis as claim 10, in light of the basis for claim 15. See the discussions regarding claims 1, 10-11 and 15 above for the details of this disclosure.

Claim 19 is rejected on the same basis as claim 12. See the discussions regarding claims 1 and 11-12 above for the details of this disclosure.

Claims 20-24 are rejected on the same basis as claims 4-8 respectively, in light of the basis for claim 19 above. See the discussions regarding claims 1, 4-8 and 11-12 above for the details of this disclosure.

Claim 27 is rejected on the same basis as claim 1. See the discussion regarding claim 1 above for the details of this disclosure.

Claim 28 is rejected on the same basis as claim 12, in light of the basis for claim 27. See the discussions regarding claims 1 and 12 above for the details of this disclosure.

Claim 29 is rejected on the same basis as claim 10, in light of the basis for claim 28. See the discussions regarding claims 1 and 10-12 above, as well as the portions of the Bolle reference cited therein, for the details of this disclosure.

Referring to claim 30, Bolle v. Pace & Hoffert discloses the method for identifying a media file resident on a network as claimed. Specifically, Bolle's (as modified by Pace & Hoffert) images in each series of images are encoded as a GOP (group of pictures)

as claimed. See the Background of the Invention section and columns 9-10 for the details of this disclosure.

Referring to claim 31, Bolle v. Pace & Hoffert discloses the method for identifying a media file resident on a network as claimed. Bolle's (as modified by Pace & Hoffert) media file identifier generating algorithm sequentially generates word counts for selected successive images [segments] in the unknown media file, and the search algorithm compares the word counts, terminating if a sufficiently close match is found [See Figures 2B & 11-12] as claimed.

Referring to claim 32, Bolle v. Pace & Hoffert discloses the method for identifying a media file resident on a network as claimed. See the Field of the Invention, Background of the Invention and Summary of the Invention sections for the details of this disclosure. Bolle's (as modified by Pace & Hoffert) unknown media file and each known media file is an audio file as claimed.

Claims 36-37 are rejected on the same basis as claims 3-4 respectively, in light of the basis for claim 31. See the discussions regarding claims 1-6 and 27-31 above for the details of this disclosure.

Claims 38-43 and 47-48 are rejected on the same basis as claims 27-32 and 36-37 respectively. See the discussions regarding claims 27-32 and 36-37 above for the details of this disclosure.

Referring to claim 49, Bolle v. Pace & Hoffert discloses the method for identifying a media file as claimed. See Figures 7-8 and the corresponding portions of Bolle's specification for this disclosure. Bolle's (as modified by Pace & Hoffert) unknown media

file is a video file [See above], and the identifier generating algorithm is a warp algorithm [See Figs. 7-8 & corresponding portions of Bolle] as claimed.

Claim 50 is rejected on substantially the same basis as claims 1, 10 and 49. See the discussions regarding claims 1, 10 and 49 above, as well as the portions of Bolle, Pace & Hoffert cited therein, for the details of this disclosure.

5. Claims 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bolle in view of Pace and Hoffert as applied to claim 1 above, and further in view of U.S. Patent Application Publication No. 2002/0087515 to Swannack et al.

Referring to claim 25, Bolle's (as modified by Pace & Hoffert) crawler is implemented on a single computer system as disclosed. Thus, Bolle does not explicitly teach the crawler implemented by a plurality of computers distributed throughout the computer network searching the network site simultaneously as claimed.

Swannack discloses a system and method similar to that of Bolle, wherein the crawler is implemented using a plurality of computers distributed throughout the computer network searching network sites simultaneously as claimed. See Figure 1 and the corresponding portion of Swannack's specification, as well as Paragraph 0255, for the details of this disclosure.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement Bolle's (as modified by Pace & Hoffert) crawler on the systems of Swannack, resulting in a plurality of computers searching the network sites simultaneously as one crawler, to obtain the invention as claimed. One would have

been motivated to do so in order to give the crawling system more processing power resulting in faster location of unknown media files needing to be identified.

Referring to claim 26, the system and method of Bolle in view of Pace, Hoffert & Swannack as applied to claim 25 discloses the invention as claimed. See the discussion regarding claim 25 above, as well as the cited portions of all specifications for the details of this disclosure. Bolle's (as modified by Pace, Hoffert & Swannack) crawler controls the plurality of computers to mimic the behavior of a human user searching the network site as claimed. This is the function of a crawler by definition, as evidenced by the cited portions of both specifications above.

#### ***Allowable Subject Matter***

6. Claims 9, 16, 33-35 and 44-46 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: As described in applicants' remarks on page 13 of the response filed 8 July 2004, Bolle does not disclose or suggest the claimed "up-down coding algorithm." As an "up-down coding algorithm" is not a common term of the art, and the specification provides explicit definition for this algorithm, the term is accorded the definition provided in the instant specification. Neither Bolle, Pace, Hoffert nor the combination thereof provides sufficient disclosure to teach or suggest the claimed up-down coding algorithm

for generating an identifier for an audio file. None of the prior art of record discloses or suggests this claimed algorithm.

### ***Response to Arguments***

7. Applicant's arguments with respect to claims 1-8, 10-12, 15, 17, 19-32, 36-43 and 47-50 have been considered but are moot in view of the new ground(s) of rejection.

Referring to applicants' remarks on page 14 regarding claims 10, 17, 31 and 42: Applicants argued that Bolle does not disclose the claimed "word count algorithm" because Bolle's segment count is not the same as the claimed "word count".

The examiner disagrees for the following reasons: The Office interprets Bolle's "segment" as equivalent to applicants' claimed "word", and thus interprets Bolle's segment counter as equivalent to applicants' claimed word count algorithm. In the instant specification at paragraph 0036, a "word" is defined broadly as a unit of grouped binary data. Bolle's segment, as described throughout Bolle's specification (specifically in Columns 9-10), is a segment of digital media data. All digital data is binary data. Thus, Bolle's segment is binary data grouped into a unit, and is equivalent to applicants' claimed "word."

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Goddard whose telephone number is 571-272-4020. The examiner can normally be reached on M-F, 9 AM - 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 571-272-4023. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2161

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bdg  
5 January 2005



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